

May 31, 2002

Compliance with Asbestos Requirements for Local Highway Bridges

COUNTY ENGINEERS/SUPERINTENDENT OF HIGHWAYS # 02-12 MUNICIPAL ENGINEERS/DIRECTORS OF PUBLIC WORKS CONSULTING ENGINEERS

The Illinois Environmental Protection Agency (IEPA) informed the department last year that bridges are considered by the United States Environmental Protection Agency (USEPA) to be "facilities" for purposes of the federal regulations governing emission standards for asbestos (40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants [NESHAP]). This determination means that work on bridges is subject to the inspection and notification requirements of the asbestos regulations. In addition, where asbestos is present on a bridge, it is subject to the requirement that a trained asbestos specialist be present when asbestos containing material is stripped, removed, or disturbed.

After receiving notification from the IEPA, the department reviewed the asbestos regulations to determine the extent to which asbestos, either in the waterproofing membrane, in the wearing surface, or in utilities attached to the structure, would be an issue for highway bridges under state jurisdiction. The department then met with the manager of the asbestos program at IEPA to obtain further clarification on the applicability and effect of the requirements relative to highway bridges. As a result of a series of meetings, procedures have been developed by the department, approved by the IEPA, and issued as Bureau of Design and Environment (BDE) Procedure Memorandum #26-02.

Local highway authorities must implement the attached procedures to be in compliance with the asbestos regulations. BLRS has also developed a flow chart titled, "Compliance Flow Chart for Local Highway Bridges with a Waterproofing Membrane or Bituminous Wearing Surface," to assist you in properly implementing the approved procedures. Please note the requirement of a trained asbestos specialist. Information concerning the training course/requirements for asbestos inspectors or a list of approved inspectors

may be obtained from the Illinois Department of Public Health (IDPH). This list will be available on the Internet in the near future. In the meantime, you can reach IDPH at (217) 782-3517.

If you have any questions, please call Teresa Price at (217) 785-1664.

Sincerely,

Darrell W. McMurray, P.E.

Daniel McMunay

Engineer of Local Roads and Streets

TCP/tcp

Attachments

Asbestos Requirements for Local Highway Bridges

Definitions

- **Bridge** Structure having a clear span greater than 20 feet as defined in 23 CFR 650.403(a). Asbestos requirements will not apply to culverts or other structures that do not meet the FHWA "bridge" definition; i.e., structures 20 feet or less.
- **Waiver List** The list of structures dated 5/10/02 and labeled, "Local Agency Bridges No Asbestos", that do not contain asbestos. This list has been exempt from the IEPA notification requirements.
- Confirmed/Unconfirmed List The list of structures initially dated 5/10/02, which will have subsequent updates and labeled, "Bridges Under Investigation for Asbestos Local Agencies". This list contains those structures that have been either confirmed or are unconfirmed to contain asbestos.

Procedures

The following procedures together with BDE Procedure Memorandum #26-02 give specific guidance on the proper forms and guidelines to be followed by local highway authorities to be in compliance with asbestos requirements for local highway bridges. As noted below, these procedures only cover asbestos in a waterproofing membrane or bituminous wearing surface and do not address asbestos in pipes, conduits, or other structures associated with highway bridges.

The department has worked closely with the IEPA to obtain a waiver from the notification requirements under 40 CFR Part 61.145 for highway bridges which the department has determined do not involve asbestos in the bridge deck wearing surface or waterproofing membrane. The USEPA has approved the initial group (Waiver List) of bridges IDOT submitted with the waiver request.

BDE Procedure Memorandum #26-02 outlines the approved documentation procedures for bridges in the initial exempt group, bridges with unconfirmed asbestos involvement, and the notification procedures and special provision to be followed for bridges involving bituminous overlays and waterproofing membranes that are confirmed to contain asbestos. However, the procedures do not address the evaluation of asbestos in structures such as tender houses associated with bridges. Work affecting such structures should be coordinated with the Asbestos Abatement Unit in the Central Bureau of Administrative & Facility Services for compliance with applicable inspection and notification requirements. This coordination should be initiated well in advance to ensure ample time for any necessary investigations and paperwork. The procedures also do not address the evaluation of and response to asbestos in pipes, conduits, or other such utilities attached to bridges. Compliance with the asbestos requirements is the responsibility of the owner of such items that may be attached to the structure. If unexpected pipes or conduits are encountered. work in the affected area should be suspended until ownership is determined and any necessary inspection, testing, and notification is completed.

BDE Procedure Memorandum #26-02 is available on the IDOT's website at http://www.dot.state.il.us/desenv/pdf/pm26_02.pdf. Contact your district if you desire a hard copy.

Determination of Asbestos

It is the responsibility of the local highway authority to determine if structures on the confirmed/unconfirmed list contain asbestos. This can be done in two ways:

- Investigation of file information, bridge plans, etc.
- Sampling and testing done by an accredited laboratory.

The local highway authority may choose to confirm such structures all at once or on a project by project basis as explained in the next section.

Forms

If structures are confirmed all at once or in groups, the local agency will submit BLR Form 5904 one time to the district with each structure listed and the appropriate box checked as described below. When confirming structures on a project by project basis the following procedure will apply.

Form BLR 5904 "Asbestos Determination Certification" must be completed by the local agency or their consultant with the appropriate box checked, signed by a licensed Professional Engineer, and submitted to the District with BLR 5901 "Preliminary Bridge Design and Hydraulic Report" for each structure.

The District Bureau of Local Roads and Street (BLRS) Office will submit a copy to the Local Bridge Unit (LBU) of the Bureau of Bridges and Structures (BBS), where the Planning Section will update the confirmed/unconfirmed list. Approval of the Preliminary Bridge Design will be withheld for those structures that are not in compliance with the asbestos requirements.

It should be noted that BLR 5901 and 5904 must be submitted for all structures undergoing reconstruction or rehabilitation, even for non-MFT structures not otherwise requiring approvals from the BBS. This will enable the department to update the confirmed/unconfirmed list.

For resurfacing projects on bridge decks, BLR 5904 must be attached with forms requesting approval of the resurfacing thickness. The BBS' Bridge Deck Resurfacing Approval Letter will indicate that asbestos requirements have been met or that the proper procedure for removal must be included in the specifications for the project.

Once again, please note that approvals from the BBS may only be given for structures that are in compliance with the asbestos requirements. Make sure that all forms are submitted well in advance to prevent any delays in scheduling a project for letting.

The following describes the appropriate boxes that should be checked when completing BLR 5904:

- Box #1 Structure on waiver list.
- Box #2 Structure on confirmed/unconfirmed list, but determined by investigation not to contain asbestos.
- Box #3 Structure on confirmed/unconfirmed list, but determined through testing not to contain asbestos.
- Box #4 Structure on confirmed/unconfirmed list and it has been determined that it does contain asbestos. Once asbestos has been removed, BLR 5904 must be submitted again with final report and Box #5 must be checked.
- Box #5 Structure on confirmed/unconfirmed list, asbestos determined, and has been properly removed.

BLR 5904 is available on the internet at http://www.dot.state.il.us/blr/blrforms.html.

If asbestos has been confirmed in a structure, Form IL 532 1296 APC 430 (Rev. 3/00) must be submitted to the Illinois EPA. The form may be downloaded from IEPA website at http://www.epa.state.il.us/air/asbestos/index.html. Since this notification generally will require information from both the contractor and local highway authority, it is suggested that the notification be filled out at the preconstruction conference. The form should be completed and submitted by the local highway authority according to the procedures in BDE Memorandum #26-02. This form may also be used for revising or canceling previous notifications.

Sampling and Testing

According to BDE Procedure Memorandum #26-02, sampling and testing is required before demolition or renovation is allowed if asbestos status of a structure is unable to be determined by other means described in the "Determination of Asbestos" section. The procedures for sampling and testing are contained in attachment 2 of BDE Procedure Memorandum #26-02. The samples shall be tested for asbestos by an accredited laboratory using the Polarized Light Microscopy (PLM) method. A listing of laboratories that are accredited for asbestos testing through the National Voluntary Laboratory Accreditation Program (NVLAP) is available at the following web address: http://ts.nist.gov/ts/htdocs/210/214/scopes/plmtm.htm. The test result from the approved testing facility shall be attached to BLR 5904 and submitted as stated in the "Forms" section.

Removal of Asbestos

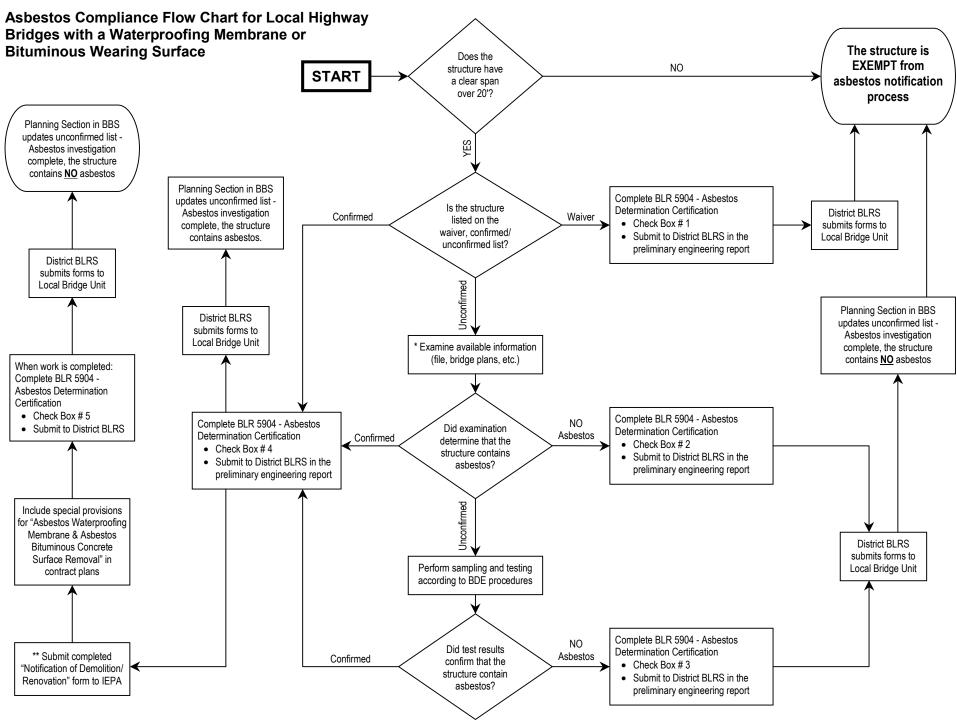
The local highway authority is responsible for ensuring compliance with the asbestos notification requirements before demolition or renovation of bridges involving deck wearing surfaces or waterproofing membranes containing asbestos. See BDE Procedure Memorandum #26-02 for the proper procedures to follow. The local highway authority or their consultant must ensure that the special provision for "Asbestos Waterproofing Membrane and Asbestos Bituminous Concrete Surface Removal" is included in the contract.

It is the responsibility of the local highway authority to submit BLR 5904 after the removal of asbestos from the structure as stated in the "Forms" section.

Updates to the List of Structures

Each district BLRS will receive an electronic version of the waiver and confirmed/unconfirmed lists for their district. Only the confirmed/unconfirmed list will be updated by the Planning Section of the BBS based on the submittals of BLR 5904.

BBS will send updates to IEPA and the Engineers of Project Development, Implementation, Operations, and Local Roads and Streets in each district in any month in which changes have occurred in the confirmed/unconfirmed list. Once the list indicates that asbestos has been removed from all highway bridges in the state, the BBS will notify the BDE. The BDE will then notify the IEPA and request approval to discontinue the enclosed procedures. Upon IPEA approval, the procedures in BDE Procedure Memorandum #26-02 will be rescinded along with Circular Letter 02-12.



^{*} Asbestos was not used in deck wearing surfaces or in water proofing membrane after 1977.

^{**} Form must be submitted to Illinois EPA at least 10 working days prior to commencing any work that would disturb any of the bituminous material containing asbestos. Start and completion dates must be included.